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Common Forage Legume Insects

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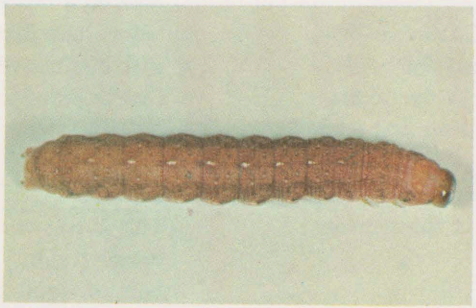
COMMON FORAGE LEGUME INSECTS

For safe and effective use of insecticides, always identify the problem correctly.

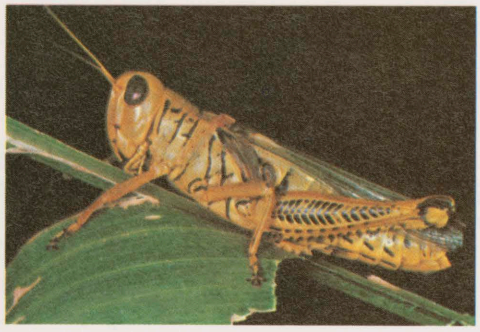
1. Alfalfa weevil adult, and larvae and damage

2. Clover leaf weevil larva

3. Sweetclover weevil and typical damage

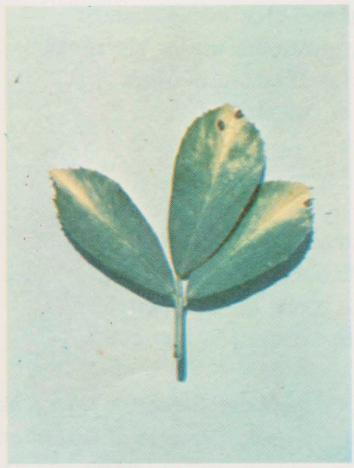


4. Varigated cutworm



5. Grasshopper

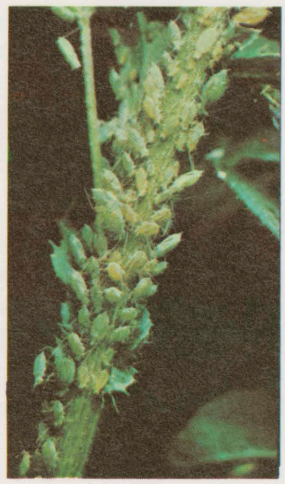
6. Green cloverworm



7. Potato leafhopper (greatly enlarged) and leafhopper damage to alfalfa

8. Meadow spittlebug and nymphs

9. Spotted alfalfa aphid



10. Pea aphid

Prepared by Extension Entomologists of the North Central States in cooperation with the Federal Extension Service, U.S. Department of Agriculture

COMMON FORAGE LEGUME INSECTS

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FS 452

Alfalfa Weevil (1)

First detected in South Dakota in Fall River County in 1936, alfalfa weevils pass through egg, larvae, pupal and adult stages and overwinters in the adult stage. Both the adults and mature larvae are about one-fourth inch long and take the nutritional value out of alfalfa by feeding on the plant tips. There is normally one generation a year in S.D. Damage occurs to the first crop and sometimes the second crop is retarded.

Clover Leaf Weevil (2)

Clover leaf weevil larvae resemble the alfalfa weevil larvae except they are larger. They feed mainly at night and hide in the field trash on the soil surface during the day. They are often present in clover and alfalfa fields during early spring. During most seasons populations are held in check by a fungus disease, Entomophthora sphaerosperma. However, severe damage to both clover and alfalfa does occur during some years.

Sweetclover Weevil (3)

This insect hibernates, overwinters and moves to the clover fields in early spring as soon as young plants are available to feed on. Adults do severe damage as they devour the plants. Larval stages feed on sweet clover roots but damage is seldom serious. Weevil populations are probably maintained on volunteer sweet clover plantings.

Varigated Cutworm (4)

This insect is one of the "climbing cutworm" groups and prefers non-grass crops but sometimes causes damage in the spring to forage legume fields. Larvae feed at night on the above ground portions of the plants and hide under clods or in soil during the day. When full-grown the worms are about 2 inches long. Several other species of cutworm often injure legume forage crops in South Dakota.

Grasshopper (5)

Several species injure forage legumes in S.D. Grasshoppers overwinter in the egg stage in undisturbed soils including legume fields. Eggs hatch and the young grasshoppers feed on the forage legume. Considerable migration into other fields frequently occurs. Damage in some years is quite extensive especially during July and August in South Dakota.

Green Cloverworm (6)

The green cloverworm can be found in alfalfa, clover and soybean fields in S.D. and on occasion causes serious injury. When worms are abundant feeding injury causes plants to take on a ragged appearance. Worms are yellow-green in color when first hatched but later take on a darker green color with distinct white lines running the length of the body. Larvae crawl in a looping motion.

Potato Leafhopper (7)

This is one of several leafhoppers encountered in alfalfa and clover fields. Where leafhoppers are abundant the plants show lack of vigor, growth is retarded, and in many cases the leaves take on a whitened mottled appearance turning yellow or brown. This leafhopper produces a burning effect on plants. Tips wither and die. Heavy infestations reduce both yield and hay quality.

Meadow Spittlebug (8)

Although this insect is a serious early season pest of alfalfa and clover in some areas, it is not of major economic importance in South Dakota. This insect is abundant in areas where high relative humidities are common. This insect hides under frothy masses of spittle and sucks plant juices from host plant.

Spotted Alfalfa Aphid (9)

Extremely destructive to alfalfa this aphid injects a toxic salivary secretion into plants while feeding. This secretion causes chlorosis at the feeding sites and yellowing of the veins as it is translocated in the phloem. During heavy infestations young seedlings are often killed and the growth of mature plants is stunted. The aphid secretes a sticky honeydew which is often infested by sooty mold. Yield, protein and carotene content of infested alfalfa may be reduced by half.

Pea Aphid (10)

Serious injury to clover and alfalfa often results from enormous aphid populations that develop in the spring. Pea aphid feeding causes alfalfa to turn yellow and wilt and may cause yield reduction or complete failure of the first crop. Young alfalfa stands may be completely killed out by this insect. Reproduction of this insect is favored during cool springs and injury is more severe during such seasons. This aphid also secretes a sticky honeydew as it feeds on the plants.

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